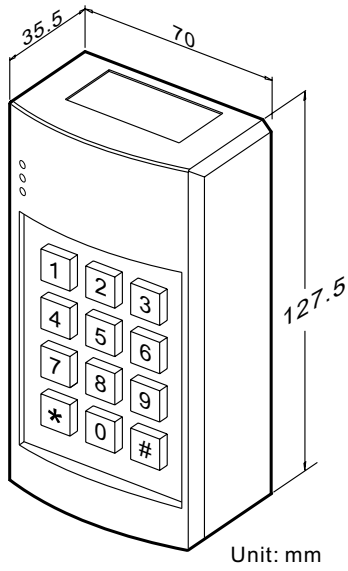
DG-1000M Standalone Proximity Reader
Operation User's Manual



Unit: mm

Normal Operations

Yellow LED is blinking, indicating stand-by mode. Depending on unit's operational mode,operation will be as follows:

Codes + Proximity
When a card is presented, a beep indicates a successful read. If card is found on unit, yellow LED begins blinking faster while waiting for a code. All five digits need to be entered, one beep each, before validation occurs. If longer than 5 seconds is taken between digits, the mode will timeout back to normal mode. If code matches expected code, green LED lights, and relay operates. If card not found, or code does not match,
red LED lights for 2 seconds and 4 beeps are heard.

Only Proximity
When a card is presented, a beep indicates a successful read. If card is found on unit, green LED lights, and relay operates. If card is not found, red LED lights and 4 beeps are heard. In this mode, all keycodes will fail immediately.

Codes or Proximity
If a card is presented, a beep indicates a successful read. If card is found on unit, green LED lights and relay operates. If a code is entered, card reading will be inhibited until all 5 digits are entered. If the code is found on unit, green LED lights, and relay operates. Card reading is re-enabled. If a card or code is not found, red LED lights and 4 beeps are heard.
In normal operations, the "＊" functions as a clear key (it will beep only if digits have already been entered) and the "#" key is disabled.

Lockout mode: If 5 incorrect access attempts (card or code) are made in a row, the unit will lockout for 60 seconds (during which time, the keypad will not beep and no cards will read.). While in lockout mode, programming mode is obviously inaccessible.

Forced Door Alarm: If the door is opened without being activated by a card\code or exit pushbutton, the alarm relay is activated, the red LED lights and a beeping pattern starts (indicating forced door). This condition persists until the door is closed again.

Door Left Open Alarm: If, after a valid operation (valid card/code/exit pushbutton), the door remains open for longer than the alarm time delay, the alarm relay is operated, the red LED lights and a beeping pattern starts (indicating door left open). This condition persists until the door is closed again.

Tamper Alarm: If the unit is opened, the alarm relay is operated, the red LED lights and a beeping pattern starts. This condition persists until the unit is closed again.

Programming Operation

Entering/Exiting Programming Mode

Enter the master code twice. A beep for each digit will sound. If valid, yellow LED becomes solid, and a longer beep confirms entry.

Note: The first time the master code is entered, the unit will reject the code. This is normal, and intended to keep the master code secret. Depending on the operational mode of the unit, the delay before the rejection will either be immediate (in a card only mode) or after the normal search time for an unknown code (approximately 1.2s).
The second attempt will enter programming mode immediately.

"#" will exit programming mode, as will 25 seconds of inactivity. A long beep confirms exit, and the yellow LED returns to normal flashing.

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Configuration Commands

Setting the Operational Mode
Enter "∗0" . Then enter xx #, where xx is "00" for Codes AND Proximity
"01" for Proximity only
"02" for Codes OR Proximity
Yellow will go off momentarily, and a long beep will sound.
If an incorrect value is entered, 4 beeps will sound.
Enter "#" to exit programming mode, or proceed with another command.

Setting the Door Relay Time
Enter "∗1". Then enter xx, where xx is "00" for latched operation
"01" for 1 second pulse
"99" for 99 second pulse
Yellow will go off momentarily, and a long beep will sound.
If an incorrect value is entered, 4 beeps will sound.
Enter "#" to exit programming mode, or proceed with another command.
Note: Latched mode will toggle the relay between NC and NO connections.

Setting the Door Left Open Time
Enter "∗2". Then enter xx, where xx is "00" to disable Alarm function
"01" to set Alarm time to 10 seconds
"99" to set Alarm time to 990 seconds
Yellow will go off momentarily, and a long beep will sound.
If an incorrect value is entered, 4 beeps will sound.
Enter "#" to exit programming mode, or proceed with another command.

Change Master Code
Enter "∗3". Enter the new, 5 digit master code. If the code does not exist elsewhere in the unit's memory, the yellow LED will go off momentarily, and a long beep will sound. If it does exist, 4 beeps will be heard, and the master code will not be changed.
Enter "#" to exit programming mode, or proceed with another command.

Card Commands

Adding cards
Enter the card position number, "000" to "999".

If red LED is on, the position is busy, and must either be cleared, or a new position selected.
◎ To clear, press "∗ ∗", which will light the green LED
◎ To choose a different position, enter position number until the green LED goes on.

If/once the green LED is on, the position is vacant, and the card can be added.
Present the card to the reader. A beep will sound.
◎ If yellow light blinks, enter a 5 digit code
◇ If 4 beeps are heard, the code already exists, and cannot be used again. Enter a different code, or "#" to cancel.
◇ If green LED turns off, addition was successful.
◎ If 4 beeps are heard, the card already exists on the unit and cannot be added again. Present a different card or "#" to cancel.
To repeat, enter a new card position number, or "#" to exit programming mode.
Notes: Irrespective of the MODE, a 5 digit code must be entered when adding a card, or the card will not be added. The Master code cannot be used as an access code. Cards must be unique on the unit (ie. no duplicates) and codes must be unique on the unit (ie. no duplicates)

Deleting cards
Enter the card position number, "000" to "999"
If red LED is on, this position is busy. Enter "∗ ∗" to clear this position.
If\once green LED is on, this position is empty.
To repeat, enter a new card position number, or "#" to exit programming mode

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Beep and LED signals

	Mode	Signal	Condition
LED Signals	Normal	Yellow (flashing slowly)	Power-on,stand-by
		Yellow (flashing quickly)	Waiting for code
		Green	Valid entry, door relay active
		Red	Warning, invalid card or code, tamper, alarm relay active
	Programming	Yellow	Programming mode active
		Yellow (flashing slowly)	Card read, awaiting code
		Green	Position available
		Red	Position occupied
	Reset	Green (flashing slowly)	About to reset Master Code
		Red (flashing slowly)	About to clear all memory
		Red	Card read, keypress
Beep Signals	Normal	1 beep	Invalid card
		4 beep	Card read, keypress
	Programming	1 long beep	Data changed, entry/exit program mode
		4 beeps	Input mistake, duplicate card, duplicate code
	Reset	1 beep	Signals steps in reset procedure

Default settings

Access Mode	Card only (1)
Card Memory	Blank
Transaction Memory	Blank
Master codes	12345 (5 digits)
Door Left Open Time	Off (0)
Door Relay Time	5 seconds (5)
Key timeout (fixed)	5 seconds
Awaiting code timeout (fixed)	5 seconds
Programming mode timeout	25 seconds

Resetting Master Code (and Memory)

To clear the Master Code only:
1. Close jumper ST1
2. Green LED flashes
3. Wait for one beep
4. Remove jumper

To clear the Master Code and ALL memory (card records and transactions)
1. Close jumper ST1
2. Green LED flashes
3. Wait for one beep
4. Red LED flashes
5. Wait for another beep
6. Remove jumper

(Memory will take approximately 30 seconds to clear, RED led will be lit during this process)

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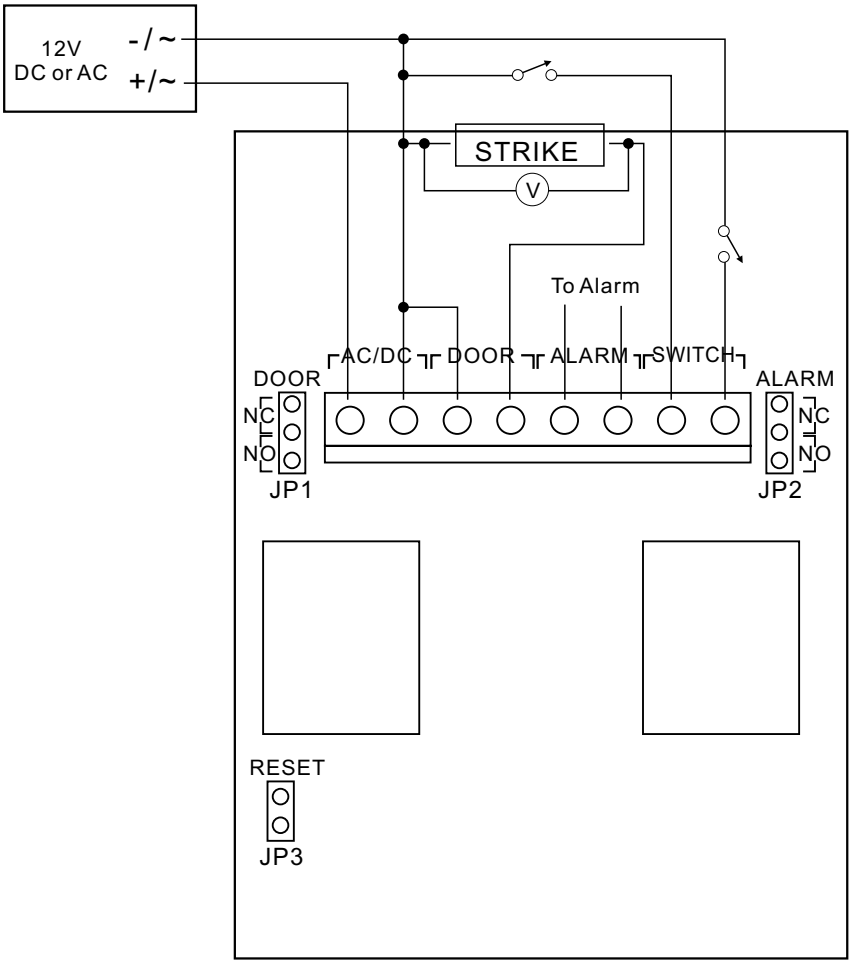
Connection Guide

The drawing below shows typical connections for the reader.



Notes:

- ◇ Power supply may be AC or DC. If AC power is used it is essential that connections to the switches are made to the ~0V connection as shown in the drawing above.
- ◇ The door strike must have a varistor across the door strike terminals to suppress the back EMF of the strike - failure to do so will damage the relay contacts and electronic components.
- ◇ The door switch must open when the door opens. Door switch functionality will not be enabled on the unit until it has detected the presence of a door switch.
- ◇ The DOOR relay contacts can be set to Normally Open (NO) or Normally Closed (NC) by setting the DOOR jumper JP1 to either NO or NC.
- ◇ The Push Button to unlock the door must be Normally Open.
- ◇ The ALARM relay contacts are voltage free and can be set to Normally Open (NO) or Normally Closed (NC) by setting the ALARM jumper JP2 to either NO or NC
- ◇ The RESET Jumper JP3 is used to reset the unit to the factory default settings and clear memory.
- ◇ The TAMPER switch will activate the ALARM relay, and is normally closed. Tamper functionality will not be enabled on the unit until it has detected the cover to have been closed. This allows the unit to be tested during installation without the back-plate being present.

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